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Office of Integrated Health Support Network Health & Safety Alert/Information

Respiratory Syncytial Virus (RSV) Health & Safety Alert

Introduction

Respiratory syncytial virus (RSV) is a common seasonal respiratory virus which causes mild, cold-like symptoms. An infected person will recover from the virus in a week or two, but RSV can become more serious for some individuals. Infants and older adults are more likely to develop severe RSV and may need hospitalization (CDC, 2023; Mayo Clinic, 2023).

Regionally in the U.S., RSV season typically starts in the fall, and extends through early spring. The majority of RSV cases peak sometime in the winter months. The timing and severity of RSV season in a given community can vary from year to year (Midgley et al, 2017; AAP, 2022; Mayo Clinic, 2023).

RSV Transmission

RSV can spread when an infected person coughs or sneezes. Virus droplets from a cough or sneeze enter another person's eyes, nose, or mouth. Or the virus can be spread by direct contact, such as touching a surface that is contaminated with the virus, like a doorknob, or light switch and then touching the face before washing the hands. RSV can survive for many hours on hard surfaces such as tables, counter tops and keyboards (CDC, 2023).

An individual with RSV is generally contagious for 3 to 8 days and may be contagious before showing signs of illness for a day or two. Some individuals with weakened immune systems can be contagious for up to 4 weeks after they stop showing signs of infection (Mayo Clinic, 2023).

Individuals are typically infected with RSV for the first time as infants or toddlers and nearly all children are infected before their second birthday. However, repeat infections may occur throughout a life-time, and individuals of any age can be infected with RSV (CDC, 2023; Mayo Clinic, 2023).



RSV Symptoms

Symptoms of RSV usually appear within 4 to 6 days after exposure to the virus. Signs and symptoms vary, but most people experience the following symptoms:

- Runny nose and congestion.
- A dry cough.
- Sneezing.
- Low-grade fever.
- Decrease in appetite.
- Headache (Mayo Clinic, 2023; CDC, 2023).

RSV symptoms typically appear in stages and not all at once. RSV infections can spread to the lower respiratory tract, developing into pneumonia or bronchiolitis. If this happens signs and symptoms may include:

- High fever.
- Severe cough.
- Wheezing.
- Rapid breathing or difficulty breathing.
- Cyanosis (bluish color of the skin due to lack of oxygen) (Mayo Clinic, 2023; CDC, 2023).

Infants are most severely affected by RSV. Signs and symptoms of severe RSV infection in infants include:

- Short, shallow and rapid breathing.
- Struggling to breathe.
- Cough.
- Poor appetite.
- Tiredness (lethargy).
- Irritability.

Most people recover from RSV within 7 to 14 days. Although some individuals might experience long-term wheezing. Severe or life-threatening infection requiring hospitalization may occur in premature infants or individuals with chronic heart or lung problems.

If symptoms don't improve or if symptoms worsen, schedule an appointment for the individual to see their primary care provider (PCP) as soon as possible (Mayo Clinic, 2023; CDC, 2023).

Individuals At High Risk For Complications From RSV

- Infants 12 months or younger, especially premature infants.
- Adults over the age of 60.
- Individuals who have neuromuscular disorders, such as muscular dystrophy, or cerebral palsy.
- Anyone with numerous medical diagnoses and chronic health conditions (congestive heart failure, dysphagia, tracheostomy, etc.).
- Individuals with weakened immune systems (immunocompromised).
- Individuals with chronic respiratory problems (Asthma, COPD/Chronic Obstructive Pulmonary Disorder, emphysema, etc.) (Mayo Clinic, 2023).

Treatment and Care of RSV

Antiviral medications are not routinely recommended to fight RSV infections. Most RSV infections go away on their own.

Over-the-counter fever reducers and pain relievers, such as acetaminophen or ibuprofen can help manage fever and minor pain. Aspirin should never be given to children.

Staying well hydrated and drinking plenty of non-caffeinated beverages is important for individuals with an RSV infection to help thin mucous secretions. (CDC, 2023).

Healthy adults and infants infected with RSV do not typically need to be hospitalized. But some older adults and infants younger than 6 months of age, may need to be hospitalized if they are having trouble breathing or become dehydrated. If hospitalized an individual may require oxygen, or IV fluids, and in some cases intubation with mechanical ventilation (CDC, 2023).

New RSV Vaccine

This year, the CDC has recommended multiple, new immunizations to protect infants, toddlers, and adults 60 years and older.

The RSV vaccine can help protect adults 60 years and older. Older individuals, and those with multiple underlying health conditions are at greater risk of becoming infected with RSV than healthier young adults. As individuals age their immune system weakens which puts them at increased risk of becoming infected. [Individuals 60 years or older](#) should talk with their PCP about if the RSV vaccine is right for them (CDC, 2023).

The RSV vaccine is also being offered to pregnant mothers. Antibodies from the immunization can be transmitted to the unborn baby if the mother receives the vaccine

while pregnant. The infant typically does not need another RSV vaccine after birth (CDC, 2023).

If a [baby is 8 months or younger](#), or entering their first RSV season the RSV antibody immunization is recommended. In rare cases, a PCP might determine an infant may need an additional RSV vaccination even though the mother received one during pregnancy.

The RSV vaccine may also be recommended for infants between the ages of 8 and 19 months entering their second RSV season who are in at least one of the following groups:

- Children who have chronic lung disease from being born prematurely.
- Children who are severely immunocompromised.
- Children with cystic fibrosis who have severe disease.
- American Indian and Alaska Native children (CDC, 2023).

Is It RSV or COVID-19?

The RSV and COVID-19 are both types of respiratory viruses, and some symptoms are similar.

The RSV and COVID-19 can occur together, which can cause severe symptoms. In addition, having RSV may lower the individual's immune function and increase their risk of getting COVID-19.

If you have any symptoms of a respiratory illness, it is a good idea to test for COVID-19 (Mayo Clinic, 2023).

IS IT RSV OR COVID-19?		
SYMPTOM	RSV	COVID-19
COUGH	✓	✓
SORE THROAT	✓	✓
RUNNY OR STUFFY NOSE	✓	✓
FEVER	✓	✓
SHORTNESS OF BREATH	✓	✓
LOSS OF TASTE AND/OR SMELL		✓
DIARRHEA AND/OR VOMITING		✓
SKIN RASHES		✓
RED, SWOLLEN EYES		✓
ONSET	2-6 days after infection	About 5 days after infection but can range from 2-14 days
SNEEZING	✓	
WHEEZING	✓	

An Individual Should See The PCP When:

- Symptoms get worse or fail to improve (could be a secondary infection).
- Fever greater than 101.3 F (38.5 C) lasting more than three days (could be a secondary infection).
- Fever of 100.4 F (in newborns up to 12 weeks) (could be a secondary infection).
- Fever lasting more than two days in a child of any age (could be a secondary infection).
- Fever returning after a fever-free period (could be a secondary infection).
- Any shortness of breath (could be bronchitis, pneumonia, etc.)
- Headache (could be meningitis).
- Throat pain (could be a throat infection, such as strep throat) (Mayo Clinic, 2022).
- Significantly swollen glands in the neck (Johns Hopkins Medicine, 2022).
- Sinus pain (could be a sinus infection)
- Coughing (could be bronchitis, pneumonia, etc.)
- Any difficulty breathing (could be bronchitis, pneumonia, etc.).
- Breathing which has a sound (crackling, whistling, wheezing, etc.) (could be bronchitis, pneumonia, etc.).
- Ear pain (could be an ear infection).
- Extreme irritability (could mean the individual is experiencing pain).
- Unusual drowsiness, listlessness or weakness. (could be sepsis).
- Lack of appetite (could be a secondary infection).
- When mucous from the nose or throat is yellow or greenish tinged and/or has a smell (Mayo Clinic, 2023; CDC, 2023).

Lower the Risk of RSV

- Stay home if sick.
- Teach individuals to sneeze into a tissue or their sleeve.
- Wash hands often with soap and water. Encourage individuals to do the same.
- Use hand sanitizer when/if you don't have access to soap and water.
- Avoid touching the face with unwashed hands.
- Avoid close contact with others when sick.

- Wash or disinfect items in common areas, such as refrigerator handles, doorknobs, phones, shared computers, and toilet and faucet handles.
- Teach individual to cover their mouth when they cough to stop the spread of the virus (Mayo Clinic, 2023; CDC, 2023).

Resources

[New Immunizations to Protect Against Severe RSV](#)

[CDC Factsheet: RSV in Infants and Young Children
Spanish Version](#)

[CDC Factsheet: Older Adults are at Higher Risk for Severe RSV Disease
Spanish Version](#)

References

1. [American Academy of Pediatrics \(AAP\) \(2022, November\). Updated guidance: Use of palivizumab prophylaxis to prevent hospitalization from severe respiratory syncytial virus infection during the 2022-2023 RSV season. Pediatrics, 1-4.](#)
2. [Centers for Disease Control and Prevention, \(CDC\). \(2023, November\). Respiratory Syncytial Virus Infection \(RSV\). National Center for Immunization and Respiratory Diseases \(NCIRD\), Division of Viral Diseases.](#)
3. [Mayo Clinic. \(2023, October\). Diseases and conditions: Respiratory syncytial virus \(RSV\). Mayo Foundation for Medical Education and Research \(MFMER\).](#)
4. [Midgley, C. M., Haynes, A. K., Baumgardner, J. L., Chommanard, C., Demas, S. W., Prill, M. M., Abedi, G. R., Curns, A. T., Watson, J. T., & Gerber, S. I. \(2017, August\). Determining the Seasonality of Respiratory Syncytial Virus in the United States: The Impact of Increased Molecular Testing. The Journal of Infectious Diseases, 216\(1\), 345-355.](#)

To the best of the OIHSN Nursing Team's knowledge the information contained within this alert is current and accurate. If the reader discovers any broken or inactive hyperlinks, typographical errors, or out-of-date content please send email to communitynursing@dbhds.virginia.gov to include the title of the Health & Safety alert with specifics details of concern.

Respiratory Syncytial Virus (RSV) Health & Safety Alert Quiz/Evaluation

Name: _____ Date: _____

Email Address: _____

Quiz:

1. Respiratory syncytial virus (RSV) is a common seasonal respiratory virus which causes:
 - a. Muscle weakness
 - b. Hives.
 - c. Mild, cold-like symptoms
 - d. Projectile vomiting.
2. RSV can be spread via:
 - a. Virus droplets in the air
 - b. Indirect contact (surfaces)
 - c. Direct contact (kissing)
 - d. A, B & C.
3. Nearly all children are infected with RSV before their _____ birthday.
 - a. Tenth
 - b. Fifth
 - c. Second
 - d. Seventh
4. RSV is typically accompanied by the following symptoms:
 - a. Dry cough
 - b. Sneezing, runny nose, and congestion
 - c. Decreased appetite
 - d. A, B & C
5. If RSV spreads to the lower respiratory tract it can result in pneumonia or bronchiolitis, with the following more serious symptoms:
 - a. Rash
 - b. Severe cough, wheezing and a high fever
 - c. Projectile vomiting
 - d. Weight gain
6. Cyanosis is a visual sign of a lack of oxygen in the bloodstream and is easily identified by a _____ colored tinge to the skin.
 - a. Yellowish
 - b. Greenish
 - c. Reddish
 - d. Bluish
7. Most people recover from RSV within ___ to ___ days.
 - a. 1 to 2 days
 - b. 20-30 days
 - c. 7 to 14 days
 - d. 1 to 5 days
8. RSV vaccine is recommended for individuals who have/are:
 - a. Age 60 & up
 - b. Chronic health conditions
 - c. Multiple diagnoses
 - d. A, B & C
9. Treatments for RSV virus may include:
 - a. Acetaminophen (Tylenol)
 - b. Rest
 - c. Staying hydrated
 - d. A, B & C
10. Some individuals with weakened immune systems can be contagious for up to ___ weeks after they stop showing signs of infection.
 - a. Four
 - b. Eight
 - c. Twelve
 - d. One

Respiratory Syncytial Virus (RSV) Health & Safety Alert Quiz/Evaluation

Name: _____ Date: _____

Email Address: _____

Evaluation:

1. Was the information presented in this Health & Safety Alert helpful?
 - a. Yes
 - b. No
2. Will you use this Health & Safety Alert information to train other staff?
 - a. Yes
 - b. No
3. Will you attend the Regional Nursing Meeting to obtain the Continuing Nursing Education (CNE) unit for this Health & Safety Alert?
 - a. Yes
 - b. Yes, but I would have attended the meeting regardless
 - c. No
 - d. No, I am not a nurse
4. What topic(s) would you like to have presented in a Health & Safety Alert for CNE's?

5. Other Comments:
